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**United States Patent** [19][11] **Patent Number:** **5,474,979****Ding et al.**[45] **Date of Patent:** **Dec. 12, 1995**[54] **NONIRRITATING EMULSIONS FOR SENSITIVE TISSUE**[75] Inventors: **Shulin Ding; Walter L. Tien**, both of Irvine; **Orest Olejnik**, Trabuco Canyon, all of Calif.[73] Assignee: **Allergan, Inc.**, Irvine, Calif.[21] Appl. No.: **243,279**[22] Filed: **May 17, 1994**[51] **Int. Cl.<sup>6</sup>** ..... **A61K 38/13**; A61K 47/34[52] **U.S. Cl.** ..... **514/11**; 514/785; 514/786; 514/912; 514/941; 514/943; 514/975[58] **Field of Search** ..... 530/317, 321; 514/9, 11, 785, 786, 912, 913, 914, 915, 941, 943, 975, 178, 179, 180, 181, 420, 784; A61K 9/107, 47/14[56] **References Cited****U.S. PATENT DOCUMENTS**

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*Primary Examiner*—Jeffrey E. Russel*Attorney, Agent, or Firm*—Walter A. Hackler[57] **ABSTRACT**

A pharmaceutical composition is disclosed in the form of a nonirritating emulsion which includes at least one cyclosporin in admixture with a higher fatty acid glyceride and polysorbate 80. More particularly, the cyclosporin may be cyclosporin A and the higher fatty acid glyceride may be castor oil. Composition has been found to be of a high comfort level and low irritation potential suitable for delivery of medications to sensitive areas such as ocular tissues. In addition, the composition has stability for up to nine months without crystallization of cyclosporin.

**8 Claims, No Drawings**